

**AMENDMENTS TO THE CLAIMS**

1. (Original) A thermal barrier coating material applicable to a thermal barrier coating for coating the surface of a base metal,  
comprising as a main component, an oxide expressed by the composition formula  $A_2B_2O_7$  (where A is an element selected from the group consisting of La, Nd and Sr, and B is an element selected from the group consisting of Ti, Si, Nb and Ta).
2. (Original) A thermal barrier coating material applicable to a thermal barrier coating for coating the surface of a base metal,  
comprising as a main component, an oxide having a  $K_2NiF_4$  structure expressed by the composition formula  $X_2YO_4$ .
3. (Original) A thermal barrier coating material according to claim 2, wherein X of the oxide expressed by said composition formula  $X_2YO_4$  is La or Sr, and Y is Ni or Ti.
4. (Original) A thermal barrier coating material applicable to a thermal barrier coating for coating the surface of a base metal,  
comprising as a main component, an oxide expressed by the composition formula  $Sr_3Ti_2O_7$  or  $Sr_4Ti_3O_{10}$ .
5. (Original) A thermal barrier coating material applicable to a thermal barrier coating for coating the surface of a base metal,

comprising as a main component, an oxide expressed by the composition formula  $\text{LaTaO}_4$ .

6. (Currently Amended) A thermal barrier coating material comprising as a main component, a ceramic composition of a combination of two or more kinds of compositions selected from the oxides as in claim 1 and claim 3 through claim 5.

7. (Original) A thermal barrier coating material applicable to a thermal barrier coating for coating the surface of a base metal,

comprising as a main component, an oxide having an olivine type structure expressed by the composition formula  $\text{M}_2\text{SiO}_4$  (where M is a divalent metal element).

8. (Original) A thermal barrier coating material according to claim 7, wherein M of the oxide expressed by said composition formula  $\text{M}_2\text{SiO}_4$  is Mg or Ni.

9. (Original) A thermal barrier coating material applicable to a thermal barrier coating for coating the surface of a base metal,

comprising as a main component, an oxide having an olivine type structure expressed by the composition formula  $(\text{MM}')_2\text{SiO}_4$  (where M, M' are both divalent metal elements).

10. (Original) A thermal barrier coating material according to claim 9, wherein M of the composition formula  $(MM')_2SiO_4$  is Mg or Ni, and M' is a metal element selected from the group consisting of Ca, Co, Ni, Fe, and Mn.

11. (Currently Amended) A thermal barrier coating material comprising as a main component, a composition of a combination of a zirconia material and an oxide as in ~~any one of claim 1 through claim 10~~ claim 1.

12. (Original) A thermal barrier coating material applicable to a thermal barrier coating for coating the surface of a base metal,

comprising as a main component, an oxide containing Nb and either an alkaline earth metal or a rare earth element.

13. (Original) A thermal barrier coating material according to claim 12, wherein said oxide is an oxide selected from the group consisting of  $Sr_4Nb_2O_9$ ,  $Sr_5Nb_4O_{15}$ ,  $Ca_2Nb_2O_7$ ,  $YNbO_4$  and  $LaNbO_4$ .

14. (Original) A thermal barrier coating material according to claim 2, wherein an X of the oxide expressed by said composition formula  $X_2YO_4$  is any one of Pr, Nd and Eu, and Y is Ni.

15. (Original) A thermal barrier coating material applicable to a thermal barrier coating for coating the surface of a base metal,

comprising as a main component, an oxide expressed by the composition formula  $\text{La}_{(1-x)}\text{M}''_x\text{TaO}_4$  (where  $0 < x \leq 1$ , and  $\text{M}''$  is a metal element selected from the group consisting of Al, V, Cr, Fe, Ga, Y, Rh, In, Ce, Nd, Sm, Eu, Gd, Dy, Ho, Er, Tm, Yb, and Lu).

16. (Original) A thermal barrier coating material applicable to a thermal barrier coating for coating the surface of a base metal,

comprising as a main component, an oxide containing Ta and an alkaline earth metal.

17. (Original) A thermal barrier coating material according to claim 16, wherein said oxide is  $\text{Ca}_4\text{Ta}_2\text{O}_9$  or  $\text{BaTa}_2\text{O}_6$ .

18. (Currently Amended) A thermal barrier coating material comprising as a main component, a ceramic composition of a combination of oxides of two or more kinds selected from the oxides as in ~~any one of claim 13 to claim 15, and claim 17~~ claim 13.

19. (Original) A thermal barrier coating material comprising as a main component, a ceramic composition of a combination of; oxides of one or more kinds selected from oxides expressed by the composition formulas  $\text{A}_2\text{B}_2\text{O}_7$  (where A is an element selected from the group consisting of La, Nd and Sr, and B is an element selected from the group consisting of Ti, Si, Nb and Ta),  $\text{X}_2\text{YO}_4$  (where X is La or Sr, and Y is Ni or Ti),  $\text{Sr}_3\text{Ti}_2\text{O}_7$ ,  $\text{Sr}_4\text{Ti}_3\text{O}_{10}$ , and  $\text{LaTaO}_4$ , and oxides of one or more kinds selected from oxides expressed by the composition formulas  $\text{Sr}_4\text{Nb}_2\text{O}_9$ ,  $\text{Sr}_5\text{Nb}_4\text{O}_{15}$ ,  $\text{Ca}_2\text{Nb}_2\text{O}_7$ ,  $\text{YNbO}_4$ ,  $\text{LaNbO}_4$ ,  $\text{X}_2\text{YO}_4$  (where X is any one of Pr, Nd and Eu, and Y

is Ni), M"<sub>x</sub>TaO<sub>4</sub> (where M" is a metal element selected from the group consisting of Al, V, Cr, Fe, Ga, Y, Rh, In, Ce, Nd, Sm, Eu, Gd, Dy, Ho, Er, Tm, Yb, and Lu), Ca<sub>4</sub>Ta<sub>2</sub>O<sub>9</sub> and BaTa<sub>2</sub>O<sub>6</sub>.

20. (Currently Amended) A thermal barrier coating material, comprising as a main component, a composition of a combination of a zirconia material and an oxide as in ~~any one of claim 12 through claim 17~~ claim 12.

21. (Original) A thermal barrier coating material according to claim 1, wherein said oxide is an oxide selected from the group consisting of Sr<sub>2</sub>Nb<sub>2-x</sub>Ti<sub>x</sub>O<sub>7</sub>, and Sr<sub>2</sub>Nb<sub>2-x</sub>Zr<sub>x</sub>O<sub>7</sub> (0 < x ≤ 2).

22. (Original) A thermal barrier coating material according to claim 12, wherein said oxide is an oxide selected from the group consisting of Sr<sub>4</sub>Nb<sub>2-x</sub>Ti<sub>x</sub>O<sub>9</sub>, and Sr<sub>4</sub>Nb<sub>2-x</sub>Zr<sub>x</sub>O<sub>9</sub> (0 < x ≤ 2).

23. (Original) A thermal barrier coating material according to claim 12, wherein said oxide is an oxide selected from the group consisting of Ca<sub>11</sub>Nb<sub>4</sub>O<sub>21</sub>, La<sub>3</sub>NbO<sub>7</sub>, and DyNbO<sub>4</sub>.

24. (Original) A thermal barrier coating material according to claim 16, wherein said oxide is an oxide selected from the group consisting of BaTa<sub>2-x</sub>Ti<sub>x</sub>O<sub>6</sub>, and BaTa<sub>2-x</sub>Zr<sub>x</sub>O<sub>6</sub> (0 < x ≤ 2).

25. (Original) A thermal barrier coating material according to claim 2, wherein said oxide is La<sub>2-</sub><sub>x</sub>Ca<sub>x</sub>NiO<sub>4</sub> (0 < x ≤ 2).

26. (Original) A thermal barrier coating material applicable to a thermal barrier coating for coating the surface of a base metal,  
comprising an oxide selected from the group consisting of composition formulas  $\text{SrYb}_2\text{O}_4$  and  $\text{Sr}_4\text{Yb}_2\text{O}_9$ .

27. (Original) A thermal barrier coating material applicable to a thermal barrier coating for coating the surface of a base metal,  
comprising as a main component, an oxide expressed by the composition formula  $\text{J}_6\text{WO}_{12}$  and  $\text{J}_2\text{WO}_6$  (where J is an element selected from rare earth elements).

28. (Currently Amended) A thermal barrier coating material comprising as a main component, a ceramic composition of a combination of materials of two or more kinds selected from the oxides as in ~~any one of claim 1, claim 3 to claim 5, claim 13 to claim 15, claim 17, and claim 23 to claim 27~~ claim 1.

29. (Currently Amended) A thermal barrier coating material comprising as a main component, a composition of a combination of zirconia material and an oxide as in ~~any one of claim 21 through claim 27, or a ceramic compositions of claim 28~~ claim 21.